What is claimed is:

1. A method for extracting a component from a heap of material, the method comprising:

after the heap has been subjected to component extraction by heap leaching for some period of time, surveying the heap to identify portions of the heap deficient in extraction of the component;

excavating a well into an identified portion of the heap determined from the surveying to be deficient in extraction of the component;

through the well, remedially treating the identified portion of the heap to improve the extraction of the component from the identified portion of the heap.

2. The method of Claim 1, wherein the remedially treating the well comprises treating the identified portion of the heap, the treating comprising introducing treating solution through the well into the identified portion of the heap and dissolving into the treating solution at least a portion of the component from the identified portion of the heap.

3. The method of Claim 2, wherein the well is completed for fluid communication with the heap in multiple zones in the well; and

the method comprises performing the treating separately on each of the zones.

4. The method of Claim 2, wherein the remedially treating the well comprises prior to the treating, hydraulic fracturing the heap within the identified portion of the heap.

5. The method of Claim 4, wherein the hydraulic fracturing comprises:

fluidly isolating a zone in the well in fluid communication with the heap;

initiating a fracture through injection under pressure of a fracture fluid into the heap at a location corresponding with the zone; and

propping the fracture open through deposition in the fracture of proppant particles transported through the well.

6. The method of either one of Claim 4 or Claim 5, wherein the well is completed for fluid communication with the heap in multiple said zones in the well; and

the method comprises performing the hydraulic fracturing separately on each of the zones.

7. The method of Claim 6, comprising performing the treating separately on each of the zones.

8. The method of any one of either one of Claim 2 or Claim 3, wherein the treating is performed without prior hydraulic fracturing of the identified portion of the heap.

9. The method of any one of Claims 2-8, comprising collecting from the heap at least a portion of the treating solution containing dissolved component extracted from the heap and removing from the collected treating solution at least a portion of the dissolved component.

10. The method of any one of Claims 2-9, comprising, after the treating, rinsing the identified portion of the heap, the rinsing comprising introducing rinse solution through the well into the identified portion of the heap to displace at least a portion of the treating solution containing dissolved component away from the identified portion of the heap.

11. The method of Claim 10, wherein:

the rinsing comprises dissolving at least a further portion of the component from the identified portion of the heap into the rinse solution; and

after the rinsing, collecting from the heap at least a portion of the rinse solution and removing from the collected rinse solution at least a portion of the further portion of the component.

12. The method of either one of Claim 10 or Claim 11, comprising further performing the heap leaching during at least a portion of the rinsing.

13. The method of any one of Claims 2-11, comprising further performing the heap leaching during at least a portion of the treating.

14. The method of any one of Claims 2-13, wherein the component is gold and the treating solution comprises a lixiviant for the gold.

15. The method of Claim 14, wherein the lixiviant for the gold comprises a cyanide material.

16. The method of Claim 14, wherein the lixiviant for the gold comprises thiourea.

17. The method of Claim 14, wherein the lixiviant for the gold comprises a thiosulfate material.

18. The method of Claim 14, wherein the lixiviant for the gold comprises a thiocyanate material.

19. The method of any one of Claims 2-13, wherein the component is a base metal.

20. The method of Claim 19, wherein the base metal is selected from the group consisting of copper, nickel, zinc, lead, cobalt and iron.

21. The method of Claim 19, wherein the base metal is copper and the treating solution is an acidic sulfate solution.

22. The method of any one of Claims 1-21, comprising:

sampling the heap during the excavating of the well; and

analyzing at least one property of a sample of the material obtained during the sampling.

23. The method of Claim 22, wherein:

the sampling comprises obtaining multiple said samples from different depths in the heap, different ones of said multiple samples obtained from different depths in the heap; and

performing the analyzing separately on each of the ones of the samples obtained from different depths.

24. The method of any one of Claims 1-23, wherein the surveying comprises forming test holes into different portions of the heap and determining a property of the heap at different lateral locations and different depths in the heap.

25. The method of any on of Claims 1-23, wherein the surveying comprises a noninvasive data collection technique to determine a property of the heap at different locations in the heap.

26. The method of Claim 25, wherein the noninvasive data collection technique comprises a geophysical survey.

27. The method of Claim 26, wherein the geophysical survey comprises a passive geophysical survey technique.

28. The method of Claim 27, wherein the geophysical survey comprises a gravity survey.

29. The method of Claim 27, wherein the geophysical survey comprises a magnetic survey.

30. The method of any one of Claims 1-29, wherein the material in the heap has been comminuted.

31. The method of any one of Claims 1-30, wherein the material comprises at least one of an ore and an ore concentrate.

32. The method of any one of Claims 1-31, wherein the heap has a depth of at least 300 feet.

33. The method of any one of Claims 1-31, wherein the heap has a depth of from 300 feet to 600 feet.

34. The method of any one of Claims 1-13 and 22-33 wherein the material comprises a metal-containing mineral material and the component is a metal.

35. The method of Claim 34, wherein the metal is gold and the heap leaching comprises applying a leaching solution to the heap, the leaching solution comprising a lixiviant for the gold.

36. The method of Claim 35, wherein the lixiviant for the gold comprises a cyanide material.

37. The method of Claim 35, wherein the lixiviant for the gold comprises thiourea.

38. The method of Claim 35, wherein the lixiviant for the gold comprises a thiosulfate material.

39. The method of Claim 35, wherein the lixiviant for the gold comprises a thiocyanate material.

40. The method of Claim 34, wherein the metal is a base metal.

41. The method of Claim 40, wherein the base metal is copper.

42. The method of Claim 40, wherein the base metal comprises one or more than one of nickel, zinc, lead, cobalt and iron.

43. The method of Claim 34, wherein the metal is uranium.

44. The method of Claim 34, wherein the metal is sodium.

45. The method of Claim 34, wherein the metal is phosporus.

46. The method of Claim 34, wherein the metal is silver.

47. The method of any one of Claims 1-3 and 8-46, wherein the remedially treating does not comprise hydraulically fracturing the well.

48. The method of any one of Claims 1-47, wherein the remedially treating comprises modifying at least one property in the identified portion of the heap.

49. The method of Claim 48, wherein the at least one property comprises pH in the identified portion of the heap.

50. The method of Claim 48, wherein the at least one property comprises a chemical modification in the identified portion of the heap.

51. The method of any one of Claims 1-48, comprising excavating a plurality of the wells into a plurality of identified portions of the heap and performing the remedially treating separately through different ones of the wells.

52. The method of any one of Claims 1-51, comprising prior to the remedially treating, performing the heap leaching.

53. The method of Claim 52, comprising further performing the heap leaching during at least a portion of the remedially treating.

54. The method of either one of Claim 51 or Claim 52, comprising further performing the heap leaching after the remedially treating.